

The Global Digital Farm is a partnership between Charles Sturt University and Food Agility Cooperative Research Centre.



Charles Sturt
University



A world first: Global Digital Farm

Hands-free commercial mixed farming operation

The Global Digital Farm will be:

- A physical and virtual hub for ideation, validation and demonstration of agritech innovations under both controlled and real operating conditions.
- An enabler of innovations in
 1. Digital tools for tactical and strategic decision making,
 2. Open book sustainability reporting and benchmarking (eg net-zero, circularity), and
 3. Workforce training and preparedness

It's the blueprint for a farm that will determine teaching, research, and farming practice of the future.

A green utility vehicle with a canopy and antennas is driving through a field of golden wheat. The field is vast and stretches to the horizon under a clear blue sky. The vehicle is positioned on the left side of the frame, moving towards the right.

Pioneering our farming future since 1892

Our Vision for the farm is:

An extensive research and innovation facility of choice, inspiring and educating clients towards a dynamic sustainable farming future

Imagine:

- A control centre – bringing on-farm technology to life while keeping track of on-farm inputs and outcomes in real time.
- An extended reality hub – a place to visualise and experiment with your farm of the future using AI/VR technology. A place to see your farm through new eyes.
- A technical lab – where we unravel complex plant-soil-water interactions that fuel sensor-derived data and management actions.
- An innovation centre – on site facilities that foster industry, research and community collaboration – A board room, lecture rooms, break out rooms. A function space and kitchen to host events. A space to host and run education sessions. A place to land big deals. A place where you dare to dream.
- Australia's first on-farm interactive experience which will bring innovations to life – Capturing the imagination of the next generation of agricultural professionals while inspiring today's workforce. Lifelong learning happens here.
- A training facility/centre – Upskill or re-train industry workforces through hands-on learning. Where seeing is learning, doing is knowing.
- A machinery and technology demonstration hub – a place for industry to develop and showcase the latest innovations to end users under real farming conditions. Credible innovation begins here.
- An on-campus community space – where learning and community intersect, supporting activities such as rural health, social inclusion, community resilience, social networking, mental health support. A place where communities of interest become communities of action.
- A fully-commercial operating farm, co-existing with a farm-wide landscape laboratory.



The Mission:

Unlock the power of data, digital technology, and world-leading research in demonstrating our sustainable farming future

The possibilities of our landscape laboratory are endless:

- Sensors and live data feeds and high-powered analytics
- Smart irrigation systems
- Precision crop and livestock management innovations
- Renewable energy systems
- Underground laboratories bringing soil to life
- Experimental farmlets
- Protected farming
- Vineyard and winery of the future
- Automated crop and pasture management systems
- Cybersecurity stress testing
- Technical masterclasses and hands-on training
- Decarbonisation strategies
- Biodiversity and natural capital programs
- Circularity



Get connected

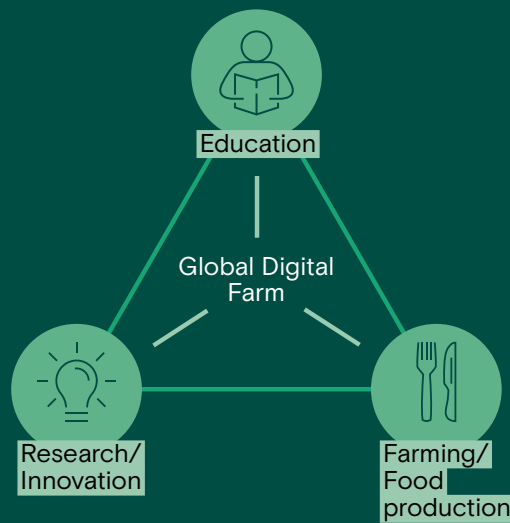
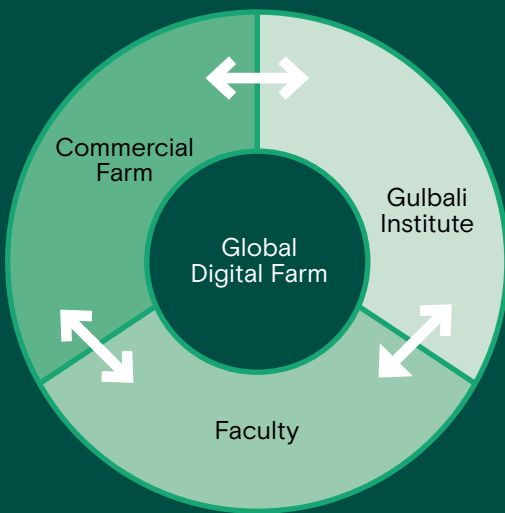
The Global Digital Farm warmly welcomes opportunities to collaborate with stakeholders from government, industry and education sectors.

Your excellence in agrifood research and innovation is brought to life at a scale and under conditions that matter.

We are a team with demonstrated experience in building and delivering impactful, collaborative projects ranging from short-term, agile pilots, to applied research demonstration projects through to long-term strategic R&D initiatives.

Charles Sturt University is one of Australia's largest educators in agriculture and food production. Industry innovation goes into the hearts and minds of our future workforce.

Let us be your partner of choice.



Contact us:

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